

88-299210/34 MITSUBISHI RAYON KK [2.01.0000-004653] (16.07.89) C09-47	A22 D16 Polymer resin compsn. used in film fibre prodn. - has poly-beta-hydroxybutyrate added to crystalline solid. polyester resin C88-107223	MITR 12.01.87 *J6 3172-762-A	MITR 12.01.87 A(3-C, 5-E1/A2, 5-E2, 7-A3A) D(5-C)
<b>The compsn. is characterized in that poly-beta-hydroxybutyrate is added to crystalline solid. polyester resin.</b>		magnesium sulphate 0.5 g/l), calcium chloride (0.11 g/l), ferrous sulphate (0.012 g/l), sodium molybdate 0.0025 g/l) and sodium chloride (0.4 g/l) and cultivated for 48 hrs. in mini-jar-fermenter. Microorganism was isolated by centrifuge, washed with water and acetone, and then extracted by emulsification. The culture was suspended in adding hexane, and dried, so that 7.8g of poly-beta-hydroxybutyrate was obtd. It was optically active and had average mol. wt. of about 1,600,000.	

**USE/ADVANTAGE**

The compsn. is useful for preparing film, fibre, heat-resistant bottle, tube, opener-tray etc. Through incorporating poly-beta-hydroxybutyrate, the compsn. has a light crystallization speed that is useful for preparing a mould, by fixing the shape or dimension through crystallizing the moulding after moulding with low temp. mould of plastic fabrication.

**EXAMPLE**

[Prépn. of poly-beta-hydroxybutyrate]. A culture liquid contg. 0.3 g of *Alcaligenes entrophus* were put in one litre of culture liquid contg. glucose 50 g/l ammonium nitrate 6 g/l potassium secondary phosphate (5 g/l)

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[Prépn. of resin compsn.] 'Dianite MA-521' (RTM: poly-ethyleneglycolate, intrinsic viscosity 0.72) 6 pts. wt.) and poly-beta-hydroxybutyrate 6 pts. wt.) was dried at 110 deg. C taking 12 hrs. or more, and then melt mixed using extruder at cylinder temp. of 235 deg. C. (5ppW18—Dw No/0).

J53172762-A